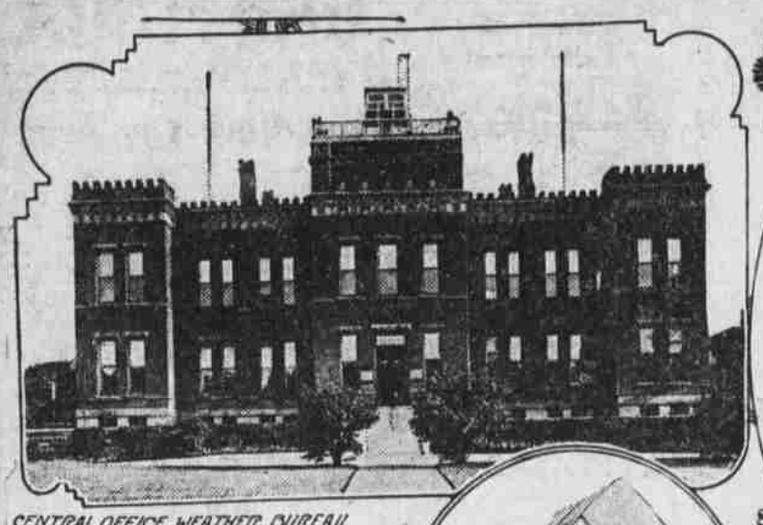
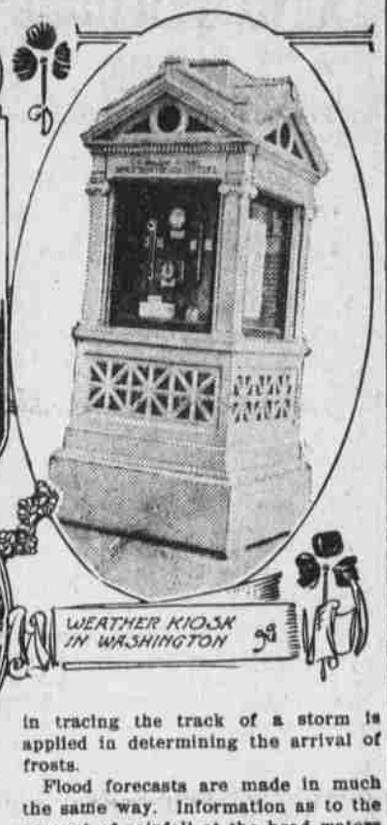
FORECASTING STORMS, FROSTS AND FLOOD



CENTRAL OFFICE WEATHER BUREAU WASHINGTON, D.C.



WEATHER BUREAU KITE WITH RECORDING INSTRUMENT ATTACHED USED IN OBTAINING UPPER AIR TEMPERATURES

WEATHER KIOSK IN WASHINGTON

MONTEREY, Colic, Dalmatian, seaman, ensue, dubbed." Why, certainly, help yourself, glad to know you, sir, or anything else you wish. That's about what you would say to anyone who stepped up to you on the street with a knowing air and delivered himself of the above quotation. There would be just a chance that he was kidding if he pulled it verbally, but if he sent it to you via wireless—well, there would be but one answer, "bughouse."

At least that would be your natural surmise, and you little know how wrong you would be. For instance, the government weather bureau at Washington receives just such messages every day in the year. And the weather bureau men know that these apparently "dippy" messages are really an important part of a great and intricate system which Uncle Sam supports to tell the people of the United States what the day is going to bring forth in the matter of weather.

As a matter of fact, "Colic, Dalmatian," etc., when translated, signifies that the steamer Monterey is saying that at 7:00 a. m. on the seventh of the month, she is in latitude 22 degrees 52 minutes; that the barometer is 30.04, the temperature 80; that the wind is northeast, blowing 14 miles an hour, and that the sky is clear. Rather an original and unique way of saying it, is it not?

It is a mighty slick little organization, this weather bureau of the department of agriculture. It keeps a small army of experts busy from seven o'clock in the morning until midnight every day in the year keeping track of just what Old Man Weather is up to, cataloguing all his idiosyncrasies and doping out what new caper he is about to cut up.

No ghost of an atmospheric disturbance, no storm wraith or cold wave apparition can stalk abroad in any cranny of the states, nowadays, without being instantly pounced upon by the nearest bureau, and its would-be secret maneuvers spread broadcast to other stations that they may expect its coming and set in motion their machinery for doping out the exact time of its appearance. It was only comparatively recently that the efficiency of the weather bureau was enhanced by an arrangement between the department and many of the big steamship lines to send semi-daily weather reports from vessels at sea beyond a distance of 75 miles from port.

Many people have an idea that there is something mysterious and occult about the work of the weather bureau in forecasting the coming of storms, frosts and floods. Not a few think that the observers must necessarily get their data by reading the planets, the stars and the moon. As a matter of fact the forecaster of the bureau foretells the coming of disturbances in a businesslike way, very similar to that in which a man who has ordered a shipment of goods would estimate the date of its arrival.

Suppose a business man had ordered a carload of pineapples from the Hawaiian islands. He would know the average time it would take the steamer to make the trip to the Pacific port, the average time for unloading and loading into refrigerator cars, and the average number of days to be allowed these cars for their trip across the continent to New York. His estimate, however, would be subject to error, because the steamship might be delayed by fog, or the cars might meet with an accident.

Storms, like pineapples, as a rule do not originate in the United States. They come to us, some from the Philippines, Japan, Siberia, Alaska, Canada or the Gulf of Mexico. The weather bureau gets cable, telegraphic or wireless notice of a foreign storm. Station after station, or vessel after vessel reports the storm's arrival in its neighborhood, so that the general direction and rate of progress can be determined very early. In fact, the arrival of some storms can be foretold ten days in advance.

The forecasters watch for the region of low barometer, which is the storm center around which the winds blow. This whirl or eddy moves bodily forward with the general eastward drift of about 650 miles a day in our latitudes. As the lines of equal pressure (isobars) around the low center crowd closer together, the winds attending the storm increase in force. The forecaster determines the direction of movement of the storm and its velocity.

When weather disturbances are reported, the forecasters know from experience about how long it takes them to reach our Pacific coast, and then how long after they will reach the Atlantic coast. For example, if a storm coming from Siberia drifts eastward around the North pole and reappears in Alaska, it should appear in Washington and Oregon in about two days; should get to the great lakes in six days and to the Atlantic coast in seven or eight days.

Unexpected conditions may delay storms or divert them from the straight track just as a refrigerator car may be thrown off its schedule or be shipped by accident on a wrong road. Some of these storms deplete themselves by running into regions of high barometer which are of greater magnitude and extent than the storm itself. Some of them, however, travel completely around the world.

To keep tab on cold waves that come into the United States from Canada and Alaska, the weather bureau studies the Canadian weather reports. England sends reports from Iceland, the British islands and continental Europe, and daily reports come from St. Petersburg on the conditions in Russia and Siberia.

The same businesslike system used in tracing the track of a storm is applied in determining the arrival of frosts.

Flood forecasts are made in much the same way. Information as to the amount of rainfall at the head waters of streams that cause floods are covered by telegraphic reports sent by local observers. As this rain reaches the main channel, the height of the water in the channel is determined by successive gauging stations. Past records establish how much a height, say of 20 feet at Dubuque, Iowa, will produce at Davenport, another station 80 miles down the Mississippi. This plan is followed all the way down the river, and at each point full allowance is made for the effects of water from tributaries, and from additional and local rainfall. As a result of these observations in the recent flood, the people of Cairo had warning a week or ten days in advance. The Pittsburgh district can be given only 12 to 24 hours' notice, because a flood is upon them within 24 hours after a heavy rainstorm.

To carry on this work of forecasting storms, frosts and floods, there are established throughout the United States 200 branch bureaus, each with apparatus for measuring rainfall, wind, etc., and with a circulating system of information between them that twice every 24 hours swaps observations, each with the other 199.

Briefly, forecasting of the modern school is resolved into watching the course of great disturbances and calculating their probable movements and the time it will take them to cover given distances. But then there is a good deal of the forecaster's work more subtle than this. For instance, it recently has been discovered that there is a remarkable interplay between atmospheric phenomena in widely separated regions. The state of the barometer in Siberia in winter is found to be related in an intimate way to the existence and progress of storms in the United States at the same time. And now the modern forecasters are reaching out into other continents for their storm warnings and prognostications.

LOTS OF BUYERS LIKE THAT

Man's Complaint That He Never Gets Quite What He Wants Is a Pretty General One.

"I never buy what I want!" explained Trazzler to his friend, Ebsan. "Every time I buy anything, no matter what, I hardly get home before I think of something else that I need worse and that I could have bought with the same or less money. Sometimes I can figure out three or four things I really need that the same money would have bought.

"There is the library table that I have needed so long. The time for it never comes—yet I paid $18 for photographs the other day. I could have bought the library table for that money. I could have paid the laundry bill with that $18."

"There is truth in what you say," murmured Ebsan sadly. "I went without a phone in my house for eight years and spent the money I could have used to pay phone rent in making monthly payments on an encyclopedia! Can you beat that?

"Many a time I hurried over to the neighbor's phone in my bathrobe and slippers when I could have had a phone right in my own bathroom, and so could have gone along with my ablutions while the boss complained over the phone about my latest blunder."

"In your bathroom!"

"Sure. I never took a bath in my life without some one calling me on some urgent matter. So my phone is in my bathroom now. I stopped payments on the encyclopedia and had a phone put in.

"But it has turned out now that I need the encyclopedia worse than I do the phone. That's the way it always is. Every time I go to take a bath now some neighbor is stricken with paralysis or some other calamity and the family has to use my phone instantly. So I have to don my dressing gown and duck into my room while the family's representative tells doctors, nurses and relatives about it."

"Even so, why do you need the encyclopedia?"

"To fill up the bookcase that Uncle Hitbottle gave me for Christmas."

Banded Against Napoleon.

One hundred years ago Great Britain, Russia, Austria and Prussia concluded the treaty of Chaumont, so called after the French town where the allied sovereigns then had their headquarters. Fearing the disputes might break up the coalition when its object—the overthrow of Nopolean—was all but accomplished, Lord Castlereagh, the British plenipotentiary, proposed to conclude a treaty among the four great powers which should bind them solemnly to one another, at first until the conclusion of the existing war, and then for 20 years afterward. The treaty of Chaumont, however, was soon after succeeded by that of Paris, signed April 11, 1814, by which Napoleon renounced his sovereignty.

EXTRAORDINARY DISHES

Mrs. Dan Crauford, whose book, "Thinking Black," has created considerable controversy, mentioned some extraordinary Central African "dishes" in the course of a recent lecture. These included stewed elephant's trunk, roast rhinoceros foot, boiled hippo tongue (stewed 48 hours to make it tender), roast wild donkey, stewed monkey, roast water rat, head, tail and all, and the luscious morsel, which a chief provided as a state delicacy, of a mess of thousands of white ants, frizzled in their own fat, like a sort of Central African whitebait. Also there was a special dish, much favored, of starchy boiled grass, "green and glutinous."

Mrs. Crauford also told of the Central African "knuts." The young bridegroom wore a necklace of teeth and hairs of the elephant's tail, and a fur boa, which any West end lady would envy, of squirrel skins, gray and white, the toilet being completed possibly—for all European garments were fashionable—by one of Mrs. Dan Crauford's skirts specially lent for the occasion.

Underworld Assurance.

"We have a number of blue laws in this town," said the police officer, warningly.

"Blue!" exclaimed the elegant crook. "My favorite color!"

SHORTEST WAY HOME

By KATHERINE HOPSON.

"We're sorry to lose you, Stewart, but don't blame you for going. It's a good chance—better than we can offer you here, perhaps for years."

Mr. Denham, managing editor of the Recorder, shook hands with Dick Stewart cordially. The younger man, after thanking him, passed out of the office with a little glow of pride and happiness.

"Old Denham's a mighty good sort, and he's right. I'm a lucky chap to get the place," he mused as he left the private office. The outer office, which had been well occupied when Stewart passed for his interview with Mr. Denham, was now practically deserted. The men had gone to fill their assignments—except Fred Davis. He was clicking away at his typewriter.

"Good luck to you," he said, looking up with his keen, peculiar smile.

Stewart left the office to fill his last assignment before taking his new position. He was sent to cover the suburban territory of Rockbridge, and departed with more than usual alacrity. Margaret Wheaton's path lay in the same direction today.

When she came six months ago to fill the position of society reporter for the office, he had fallen in love with her big brown eyes, her kindliness, her spontaneous gayety, and the general dearness of her. But he recognized the fact that Fred Davis also had fallen victim to her charms.

"No wonder he congratulated me so heartily on my new job; for it leaves the way clear for him," Stewart thought with a cynicism foreign to him.

"Well, at last I have a man-size job, and I am justified in speaking to Margaret."

He quickened his steps toward the interurban station, and was so occupied that he failed to notice a tall, slender, keen-eyed man dodge into the waiting room, and then watch to see which car he—Stewart—entered before getting on himself and entering the smoker. Nor did he see him repeat the same watchful performance before they both alighted at Rockbridge.

Stewart hastily covered his own territory, then hastened to the church where the Patton-Whitney wedding had just taken place, the reporting of which was Margaret's object in coming to Rockbridge. She had come down on an earlier car, and Stewart had timed himself so that he might arrive on the scene when she was finished with her work. Then he could return to town with her.

He found reporters from other papers there and stood a few moments in the fragrant flower decorated church in which strains of the wedding music seemed still to linger.

Margaret was not there and he made inquiries. Some one told him she had just gone; but whether to the station or to the Whitney home where the reception was to be, he couldn't say. Stewart looked at his watch.

"There won't be another car for three-quarters of an hour yet. I guess she's gone to the house."

Accordingly he made his way to the place in question. It was one of the largest, most pretentious homes in the suburb. Many persons in wedding attire were streaming to the reception when he reached the house, and he made his way through the guests and onlookers with which the walk was lined. From one of the caretakers he learned that Margaret had been there. By announcing himself as a representative of the Recorder he gained entrance. Everybody except the girl he was looking for seemed to be there, and the most careful search failed to reveal her.

"Say, how many people does your paper send out to write up these social affairs?' asked one of the guests whom he knew.

"One—usually. Why?"

"Well, you're the third this afternoon who has presented himself in that capacity. I believe the first one was a her," laughed the man.

"Miss Wheaton, of course, our regular society reporter. But I don't know any other from our office who would be here."

"Oh, he was a tall, slim chap, with shifty dark eyes."

"The description fits Davis, but he was sitting in the office when I left."

Stewart rapidly retraced his steps to the station, and found to his chagrin that in his search he had not allowed himself enough margin to catch the next car, and missed it by about three minutes. He could see it disappearing in the distance.

"Yes, Miss Wheaton got on the car," drawled the station agent in answer to the question.

"Was any one with her?"

"Yes, that tall chap who reports the sporting news."

Stewart turned away from the window. "It's certainly Davis," he concluded grimly. "But how in the world did he get here?" Then sober reason told him that the only way was on the same car as himself. Cut across back way and got on the smoker."

He sat down and wrote out in full the notes of the legal transfers he was sent to cover. "I can slap them off on the typewriter when I get back," he told himself. His sense of resentment was growing. He had received the letters from New York that morning giving final acceptance of his application for a position. Denham had strongly advised him to take the morning train.

"They don't leave you much time to pack your trunk and make farewell calls on these New York jobs. There are too many others waiting around to snap up the place," the managing editor had said.

Stewart had decided to take his advice, still planning how he might have a chance to talk with Margaret. She knew he had applied for the position, but as she was away all morning on an assignment, she didn't know of his acceptance.

"Every minute is precious, for I have a thousand things to do," fumed the young fellow, as he paced restlessly up and down the platform. "It was a low trick of Davis to beat me to it here, when he knew I was going away so soon."

At last the next car came and bore him back to town.

When he reached the office it was just as he expected. Margaret had gone home to dinner. He called up her boarding place. She was there, but when he asked to come down that evening she replied that she was going to report another wedding which was going to occur in that vicinity that evening. "But you may come and go with me if you like. It won't take me long."

When he told her of his intended departure next day, her invitation was more insistent.

With good-by handshakes to other members of the staff, Stewart left the office. On the way to his room he stopped and got lunch at a restaurant, then he went off home and began hastily to pack his trunk. As he worked he glanced around the bare little room where he had passed many lonely, homesick, discouraging moments.

"I've hated the place, but it seems quite like home when I go to leave it." He thought of his old, pleasant home in the little town of Carbon which he had left to take his first newspaper position here, and his sense of homesickness increased. "It will all be to do over again when I reach New York, only it will be much harder to gain a foothold there."

He found Margaret waiting for him when he reached her boarding place. She had on her wraps, and her brown eyes were shining under the smart little toque.

On the way he told her more about his new position, and his hopes and plans for making good. She was all kindness and attention, yet, withal, he had the sensation that she was trying to steer the conversation away from personalities. It seemed to him that she dragged out the work unnecessarily long at the house; and when they were at last free to go, he took matters into his own hands, and insisted that the longest way round was the shortest way home.

"Has Davis asked you to marry him?" he asked.

At first she looked offended, then she said archly, "What if he has?"

"I want to know if you accepted him."

"I probably shouldn't be walking here with you if I had," she laughed. "What difference does it make?"

"Merely, that I'm going to ask you the same thing." And he poured out the love and longing of the last months.

"Instead of the waste of boarding houses it would mean home—and that's as near heaven as we ever get on this earth, I reckon," he ended huskily.

For a few moments there was silence, and they walked on beneath the trees which rustled their dry leaves in the soft autumn night. He, in alternate hope and despair; she, with her eyes turned away, gazed up at the hazy harvest moon. But by the light of it, when her glance met his, he could see they were full of tears.

"I, too, am tired of reflected joy," she answered slowly, nodding toward her reporter's note-book he was carrying. "Instead of writing up other people's engagements and weddings—I—I want one of my own."

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FEW OF HIS KIND REMAIN

Eulogy Pronounced Over "Uncle Tip" Proved Him Somewhat Peculiar Type of Magistrate.

"My uncle, Tip Waller, who used to be justice of the peace in and for Shagbark township, had a wooden leg, and otherwise was about as queer an excuse for a judicial personage as anybody ever heard of," related the Old Codger. "But in spite of all that the voters regularly tuckered to it and reelected him by overwhelming majorities. You see, he was so quaint and unprecedented, and had such small respect for tradition and knew so little of jurisprudence that, just as likely as not, he'd get the would-be litigants together informally when there was a row on hand, listen to both sides, pry into the matter while he smoked his old cob pipe, adjudicate the squabble according to the truth and horse sense and then tell 'em a funny story that would send everybody away happy. Uncle Tip's funeral was the biggest ever held in that neighborhood; several people cried, and one old feller remarked to a stranger who came rambling around and inquired the secret of the late gent's popularity: 'The 'squire was a helva justice, but he was a helva honest man!' And I guess that covered Uncle Tip's case about as fully as anything could have done."—Kansas City Star.

Not for Her.

"What did you say to him, dad?"

"I asked him if he could support you in the style to which you had become accustomed."

"And he?"

"He said he could."

"If he tries it, I'll divorce him!"

DIZZY, HEADACHY, SICK, "CASCARETS"

Gently cleanse your liver and sluggish bowels while you sleep.

Get a 10-cent box.

Sick headache, biliousness, dizziness, coated tongue, foul taste and foul breath—always trace them to torpid liver; delayed, fermenting food in the bowels or sour, gassy stomach.

Poisonous matter clogged in the intestines, instead of being cast out of the system is re-absorbed into the blood. When this poison reaches the delicate brain tissue it causes congestion and that dull, throbbing, sickening headache.

Cascarets immediately cleanse the stomach, remove the sour, undigested food and foul gases, take the excess bile from the liver and carry out all the constipated waste matter and poisons in the bowels.

A Cascaret to-night will surely straighten you out by morning. They work while you sleep—a 10-cent box from your druggist means your head clear, stomach sweet and your liver and bowels regular for months. Adv.

"Good Old Times" Again.

Hospital patients of today are better off than their ancestors of "the good old times." Mr. Wheatley, in his book on "London," quotes from a Scottish act of parliament of 1386 to the effect that "if ony man brings to the market corrupt swine or salmond to be sauld, they shall be taken by the baillie, and incontinent, without ony question, sall be sent to the leper folke;" and if there be no lepers then only "sall they be destroyed utterlie." The same pleasant custom obtained in Oxford in the fifteenth century, where all putrid meat and fish was by statute sent to St. John's hospital.

THE BEST TREATMENT FOR ITCHING SCALPS, DANDRUFF AND FALLING HAIR

To allay itching and irritation of the scalp, prevent dry, thin and falling hair, remove crusts, scales and dandruff, and promote the growth and beauty of the hair, the following special treatment is most effective, agreeable and economical. On retiring, comb the hair out straight all around, then begin at the side and make a parting, gently rubbing Cuticura Ointment into the parting with a bit of soft flannel held over the end of the finger. Anoint additional partings about half an inch apart until the whole scalp has been treated, the purpose being to get the Cuticura Ointment on the scalp skin rather than on the hair. It is well to place a light covering over the hair to protect the pillow from possible stain. The next morning, shampoo with Cuticura Soap and hot water. Shampoos alone may be used as often as agreeable, but once or twice a month is generally sufficient for this special treatment for women's hair.

Cuticura Soap and Ointment sold throughout the world. Sample of each free, with 32-p. Skin Book. Address postcard "Cuticura, Dept. L, Boston."—Adv.

Administration's Peril.

In their own serious way the pupils in the grade schools of New York are watching history in the making. In one of the schools where a large number of foreigners are being taught the teacher was asked by a litle fellow what she thought of the administration's scheme to apply the literacy test to immigrants. The teacher merely explained what the literacy test meant, thinking that was what the youngster wanted. When she finished a little Italian boy piped:

"The administration had betta watch out or the black hand will get him."

CHILDREN LOVE SYRUP OF FIGS

It is cruel to force nauseating, harsh physic into a sick child.

Look back at your childhood days. Remember the "dose" mother insisted on—castor oil, calomel, cathartics. How you hated them, how you fought against taking them.

With our children it's different. Mothers who cling to the old form of physic simply don't realize what they do. The children's revolt is well-founded. Their tender little "insides" are injured by them.

If your child's stomach, liver and bowels need cleansing, give only delicious "California Syrup of Figs." Its action is positive, but gentle. Millions of mothers keep this harmless "fruit laxative" handy; they know children love to take it; that it never fails to clean the liver and bowels and sweeten the stomach, and that a teaspoonful given today saves a sick child tomorrow.

Ask at the store for a 50-cent bottle of "California Syrup of Figs," which has full directions for babies, children of all ages and for grown-ups plainly on each bottle. Adv.

Explained.

Patience—Thought it was against the law to wear aigrettes?

Patrice—That's not an aigrette; that's her husband's shaving-brush she's got stuck in her hat.